CHESHIRE COUNTY COUNCIL.

EDUCATION COMMITTEE.

REPORT

OF THE

Chief School Medical Officer

FOR THE YEAR

1924,

BY

MEREDITH YOUNG,

M.D., D.P.H., D.S.Sc.,
Of Lincoln's Inn, Barrister-at-Law,
Lecturer in School Hygiene, Victoria University of Manchester.

Digitized by the Internet Archive
in 2017 with funding from
Wellcome Library

https://archive.org/details/b29103836

MEDICAL INSPECTION.

STAFF.

School Medical Officer:

Meredith Young, M.D., D.P.H., &c.

Assistant Medical Officers:

A. V. Stocks, M.A., M.B., Ch.B., D.P.H.
W. J. McIvor, B.A., M.B., Ch.B., D.P.H.
Marjorie A. Grant, M.B., Ch.B.
Marjorie H. King, M.B., Ch.B.

Ophthalmic Surgeons:

G. Aubrey Jelly, M.R.C.S., L.R.C.P., D.P.H.
Cyril Jacobs, M.B., B.S.

School Dentists:

S. Whitworth, L.D.S.
T. McClelland, L.D.S.
H. R. Parry L.D.S.

Health Visitors: 33.

Dental Nurses: 4.

Chief Clerk:

Vincent O'Connor.

CHESHIRE COUNTY COUNCIL.

EDUCATION COMMITTEE.

INTRODUCTION.

To the Chairman and Members of the
Education Committee.

Mr. Chairman, Ladies and Gentlemen,

I herewith submit my Report on the Medical Inspection and Treatment of School Children in your County for the year 1924.

This work has made further progress since I reported upon it last for your Committee have appointed two additional whole-time Dentists and a number of Minor Treatment Centres have come into operation.

There is, however, still room for improvement as I know your Committee realises. The most urgent need I think is the care of crippled children. Only a small fraction of these cripples can at present get the Hospital treatment and the after care which they so badly need. The after-care would not present any serious difficulty, but before it can be of any benefit in most cases a period of In-patient treatment is required. For cases where the crippling is due to tuberculosis—roughly about 40 per cent. of the cases—treatment is already available. But for the others no organised scheme of assistance (except in two areas) is available. I feel sure that your Committee will give this matter earnest and sympathetic consideration.

You will find in the body of this Report and in the Appendices notes on several matters which have been specially investigated by your Assistant School Medical Officers, and I desire to acknowledge fully my indebtedness to them for the readiness with which they have undertaken the extra work involved.

I am grateful to all those with whom my work has brought me in contact for many courtesies and much help.

I thank your Committee for the kindly way in which you have always considered any suggestions I have felt it my duty to put before you.

I am,
Mr. Chairman, Ladies and Gentlemen,
Yours obediently,
MEREDITH YOUNG.

Chester,
May, 1925.

CHESHIRE COUNTY COUNCIL.

EDUCATION COMMITTEE.

ANNUAL REPORT

OF THE

CHIEF SCHOOL MEDICAL OFFICER,

for 1924.

Co-ordination.

All the health services administered by the County Council are operated from the same Department. The control of tuberculosis is the only part of the health work which is separately administered, but even here the closest co-operation with school and other work has always been maintained. In the case of all the agencies, voluntary and official, connected with the well-being of school children I have always maintained sympathetic relations and have invariably received the kindest of assistance from them.

School Hygiene.

There is but little of interest to note in this connection. Quite a number of repairs have been carried out on reports from my Assistants, including re-drainage, new water-supplies, improved heating, lighting, cleaning and ventilation and in a few cases new furniture.

The following report by Dr. A. V. Stocks and Dr. M. H. King will give an idea of the work done under this heading :—

"*Drainage, etc.* : Broken downspouts and stopped-up grids were reported upon at two schools and a broken waste pipe at another. Several defects in latrines and urinals were reported upon during the year (in six schools in all).

"*Heating* : this was found to be unsatisfactory at three schools, and in another the boiler house is periodically flooded after heavy rain, putting the fires out just when they are often badly needed and lowering the temperature in all the classrooms ; an inexpensive way of remedying this was pointed out.

"A central system of heating has been installed at one school since last year.

"*Lighting*: electric light has been installed at one school since the last report.

"*Furniture, etc.*: new dual desks installed in one school have led to a great improvement. Floors were found to be in need of repair in three schools.

"*Cloak-rooms*: extra pegs and additional taps have been put in since the deficiency was pointed out at one school a year ago. Several similar cases were reported upon this year.

"*Water supply*: the analysis of the water mentioned in last year's report proved to be satisfactory. At one school in a town district the water supply from the taps had been reduced to a small trickle and the water contained much deposit of rust. The pipes supplying the school had been laid 38 years ago and were then only ⅜ inch bore. The defect was remedied, after being pointed out, by installing new supply pipes, and I saw a section of the old pipe so corroded and choked with layers of deposit as to leave only a minute channel in the centre for the water to flow through. Another school has now obtained a proper supply of tap water from the Liverpool pipe line since last year, and another school has had a rain-water collection system installed to supply washing water. Four schools seem to be without a proper supply of their own, in one case owing to their own well having become choked."

Dr. Marjorie H. King reports as under:—

"*Surroundings*: the majority of the rural schools in my area have unsatisfactory playgrounds. The surfaces are rough and irregular, dusty in summer and muddy in wet weather, unsuitable and dangerous for play or physical exercises.

"*Ventilation*: good on the whole.

"*Heating*: usually satisfactory.

"*Sanitary Conveniences*: very many of the schools in my area have no water carriage system nor any prospect of any. The dry closet system is usually managed well and are satisfactory as far as they can be. In one or two cases more frequent cleansing was advised.

"*Water supply*: frequently from pumps in playground or in village street or in school house garden. This is unsatisfactory but impossible to remedy for some time. In one or two cases the water was unfit to drink, but this was seen to at once."

Medical Inspection.

The figures shewing the extent of the inspectional work are given in full in one of the Appendices to this Report. Summarised they shew the following :—

		Number examined.
Routine Inspections	Entrants	6,501
	Intermediate Groups (8–9 years)	5,906
	Leavers	6,799
	*Others	119
	Total ...	19,325
Special Inspections	Special Cases	6,830
	Re-Examinations	4,478
	Total ...	11,308
	Grand Total ...	30,633

* For Wembley Exhibition.

In all cases the inspection has been carried out in accordance with the Board's schedules and regulations. Certain special work has been carried out which is noted later in this Report.

Co-operation of Teachers and Others.

The following extracts from the reports of my Assistants are sufficient to shew that the relations of all concerned with the school life of the child have continued to be happy and mutually helpful.

Dr. A. V. Stocks writes :—

"I have again received the most valuable assistance from head teachers in almost every school I have visited in planning and arranging the work, selecting special cases, clerical work and the onerous task of weighing and measuring all the children. I should also like to refer to the very great help I have received from most of the Head Masters of the Secondary Schools visited : in nearly every case they are keenly interested in the scheme of medical inspection and appreciate its value. This naturally produces an atmosphere that makes the work much more satisfactory and easy than might be the case otherwise."

Dr. Marjorie A. Grant also reports :—

"The co-operation of the Head Teachers has been of great benefit to the School Medical Inspection. In many schools lists have been made out classifying the children into their respective groups and in many cases notes made with reference to special cases—as for example, symptoms noticed by them with regard to nasal obstruction, deafness, mental conditions, etc.

"The attendance of parents at the Medical Inspections has been good. In most cases the parents have attended from their own personal desire and interest ; in others their presence has been due to Head Teachers who have written personally to the parents requesting their attendance if possible, and in a few cases where there have been objections to the inspection, the teachers have taken trouble to overcome their scruples."

Co-operation of Parents.

As the real value of medical inspection and associated treatment becomes more widely appreciated so does the attendance and co-operation of parents increase. The following remarks of Dr. A. V. Stocks represent, I think, the conditions prevailing all over the County :—

"The number of parents attending at the inspections has been greater than in any of the preceding four years. The numbers were 2,087 in 1924 and 1,608 in 1923. The number for 1924 represents one-third of the children examined, which, considering the scattered area from which they come in the rural districts and the fact that many do not seem to think they need come for the older children who have been examined twice before and found to be healthy, is a very satisfactory total. It certainly points to an increasing interest in and appreciation of the whole idea underlying the scheme of medical Inspection. It is now quite a common thing for head teachers to be asked when the school doctor is coming and for the parents to ask if children not in the code groups can be examined."

Dr. Marjorie H. King reports :—

"The number of parents attending the medical inspection varies greatly in the different schools. I find that this depends very much on the attitude of the head teacher. Some encourage the parents to be present and some do not. In the Infant schools the attendance is usually very good. Parents are of great assistance in the examination of infants and always most anxious for advice and willing to take it. There are remarkably few objectors to medical inspection. Some are those whose children have been previously found defective in some way—usually dirty. A scattered few are those who consider that as 'they have their own doctor a school doctor is unnecessary,' and there are others who object to anything and everything as a matter of course."

The Findings of Medical Inspection.

Malnutrition.—Although this is only noted in 39 cases where the condition was so marked as to call for special treatment there is no doubt that a regulated search would reveal many more cases. Indeed recently a special investigation the results of which are given in an Appendix shew that quite an appreciable number of children suffer from this condition. It is not at all an easy matter to set out a nutritional standard for weight is only one factor.

Dr. Stocks found that out of 1,055 children in rural schools 42, or 4 per cent., shewed distinct signs of malnutrition as compared with 166 out of 2,700, or 6.1 per cent., of children in town schools. (See Appendix).

Dr. Marjorie H. King reports:—

"I do not consider that the standard is high in my area. I have suggested several causes for this such as the condition of the homes, wrong feeding, under-feeding and insufficient rest and sleep. With regard to this question of sufficient sleep I find it most difficult to persuade many parents that the growing child needs much more rest and sleep than the adult. It is a frequent custom for the whole household of all ages to go to bed at the same rather late hour. One parent actually told me that she *could not make* her child, aged 5, go to bed before the mother herself went, and this mother brought the child to to me because of its 'nerves'! Parents very often tell me that children will not go to bed and sleep in daylight. I advise bed early whether they sleep or not."

Uncleanliness.—Here we have records of 726 cases where the body or clothing was so unclean as to merit notice. In several instances the same child will be reported as 'unclean' three or four times a year and strong action has to be taken. In cases such as these the Health Visitors have their tact tried rather high, but I have had no complaints on this score.

Dr. A. V. Stocks gives some precise figures under this heading which are interesting. He writes:—

"The percentage of children with unclean heads was 4 per cent., or 203 out of 5,000 examined, practically the same percentage as last year (3.9 per cent.) The state of cleanliness of the body was on the whole rather better, the number noted as not clean being 241, or 4.8 per cent., as against 5.5 per cent. in 1923."

Skin Diseases.

Under this heading we have 178 cases of ringworm of the scalp with 73 cases of the same disease on the body, 85 cases of scabies (itch), the large number of 1,003 cases of impetigo and 77 other skin diseases. Impetigo or scald head as it is sometimes called can be a veritable pest when introduced into a school as the microbe concerned—the streptococcus—is somewhat resistant. When the disease has gained a footing treatment with a sulphur lotion six or seven times a day is required and few parents will give the time necessary for this.

Dr. Marjorie A. Grant offers the following observations on ringworm :—

"Apart from the few sporadic cases which occur in schools with unknown cause of infection, we have had a small epidemic in Bowdon Infants' School, where out of 50 children in the school, 18 were found to be suffering from ringworm of the scalp.

"It was interesting to watch the effects of the two recognised methods of treating ringworm, namely, by ointment and X-ray. There being no school clinic in Altrincham the use of iodine and ointments was left in the hands of the parents, with strict injunctions with regard to closely fitting skull-caps worn during school hours.

"After a period of three months the school was re-examined with the following results :—

18 cases reported :—
6 permanent cures from X-ray.
2 permanent cures from ointment and iodine.
10 cases treated by ointment, etc.,
still shewing scales and stubbles, and obviously still infective, pointing out I think, the clear superiority of X-ray treatment of ringworm of the scalp, over the use of iodine and ointment."

Dr. Stocks reports that "twenty-two cases of ringworm were seen at the routine inspections, about the same percentage as last year. Impetigo seems to have been more prevalent. Only two cases of scabies were met with : this disease seems to be becoming less and less common as the interval elapsing since the war lengthens. In the treatment of these various complaints the work of the School Nurses at the Minor Ailment Clinics has been invaluable, not only in preventing the spread of infection but also in reducing loss of school attendance, in that cases of impetigo have been cured in a week or so that without treatment would have become much worse and lasted very much longer."

Eye Diseases and Defects of Vision.

The outstanding figures given under this heading shew that 2,373 cases of defective vision other than squint were discovered at routine or special inspections and 486 cases of squint. Blepharitis or inflammation of the eyelids was recorded in 380 cases. The figures for other conditions are not large as a reference to Table II. in the Appendix will shew. The special clinics for refraction work are still continued and the scheme for the assisted supply of spectacles has not been altered. Writing on this subject Dr. Stocks reports :—

"Blepharitis was found in 88 cases, representing a percentage of 1.7, about the same as last year. Conjunctivitis was seen in 28 children at the routine inspections.

"Strabismus was met with in 109 of the children in the code groups, or 2.2 per cent. In 91 cases the strabismus was internal (right eye 44, left eye 47). In the rest it was either external, alternating or indeterminate.

"Corneal opacities were responsible for 15 cases of defective vision and coloboma iridis for one case.

"Out of 5,000 children in the routine age groups 100 were wearing spectacles—in most cases provided by the County."

Dr. Marjorie H. King reports :—

"Very many cases of defective vision were found. The school lighting would seem to affect the numbers, some schools having many cases while others had few. This is a defect that, when pointed out, is very frequently remedied by the parents.

"External eye diseases are extremely rare as compared with town figures. I met no epidemics of conjunctivitis. Blepharitis is the most common complaint and that is quite usually treated."

Ear Diseases and Defective Hearing.

We have had 129 cases of Otitis media (commonly known as "discharging ears") reported and 113 cases of defective hearing. The former are largely dealt with at the Minor Treatment Centres where much better results are naturally obtained than with home treatment—which last often means no treatment at all. It is very difficult to convince even fairly well educated people that the syringing of the ear is a technical procedure demanding some knowledge of Anatomy if it is not to do harm instead of good.

Dr. Marjorie A. Grant offers the following remarks on this subject :—

"The treatment of Otorrhoea (ear discharge) has many grave difficulties, owing to the fact that its common occurrence in school children makes the parents and teachers underestimate its seriousness.

"Several cases reported in previous medical inspections have been found to have been more or less neglected. In many cases of course the school Clinics, and the School Nurses have treated catarrhal conditions, with excellent results. In other cases where removals of enlarged adenoids (a frequent cause of Middle Ear disease owing to Eustachian Tube involvement) has been done a permanent cure has resulted.

"Still there remains, however, a large number of cases in which no serious regard is paid to Otorrhoea—with the result that *these* children are going about with as Sir William Millegan (Ear, Nose and Throat Specialist) once put it, 'a quiescent volcano waiting for eruption.'

"One case we heard of in Timwistle, where a child who had suffered from untreated Middle Ear disease for years (but whose parents had been warned by School Doctors) succumbed to a sudden onset of Meningitis, due without doubt to the previous ear trouble."

Dr. Marjorie H. King reports :—

Speech Defects.—"I have met during the year two or three cases of very defective speech and these were very defective mentally. Stammering is fairly common but usually tends to improve and gradually disappear. Among the younger children 'baby speech' is common and frequently distresses teachers, who wonder if the child is 'tongue-tied.' Home influence is usually responsible and school cures this defect."

Nose and Throat Diseases.

The chief findings under this heading may be summarised as under :—

Enlarged Tonsils only	258	cases.
Adenoid Hypertrophy only	213	,,
Both Enlarged Tonsils and Adenoids ...	560	,,
Other conditions	142	,,
Total	1173	,,

These figures should satisfy your Committee that the provisions you have made for the treatment of such conditions at the various Hospitals in the County are really essential if the full value of their educational life is to be gained by children handicapped in the way indicated.

Dr. A. V. Stocks comments upon the association of caries of the teeth and affections of the nose and throat and gives some interesting figures which I quote hereunder :—

"I have been interested for some time in the influence that decayed teeth exercise upon this very common ailment. Dr. Still in his book 'Common Disorders and Diseases of Childhood' says 'In connection with recurring tonsillitis one point is often overlooked, namely, the connection between decayed teeth and faucial inflammations. No-one doubts that the recurrence of tonsillitis depends upon fresh outbreaks of infection in the crevices and irregularities of the tonsils . . . but how often one sees children who are being assiduously painted and sprayed and dosed in the hope of preventing the frequent sore throats, whilst no-one pays any special attention to several decayed teeth and foul stumps, perhaps with pus actually oozing from the gums, a veritable hotbed of infection.'

"I have analysed 1,000 cases that I have seen at the routine inspections in the town of Runcorn and find the following results :—

Infants.

Average number of carious teeth per child, 1.58.
Average number of decayed teeth per child with enlarged cervical glands, 1.62.
Average number of decayed teeth per child who has enlarged tonsils, 1.77.

Intermediates and Leavers.

Average number of decayed teeth per child, 1.21.
Average number of decayed teeth per child :
  amongst children with enlarged glands of neck, 1.7.
  amongst children with enlarged tonsils, 1.7.

"While amongst the infants there does not seem to be very much difference, in the older children it is somewhat striking that the average amount of dental decay should be over 40 per cent. higher in the children with enlarged glands and also amongst those with enlarged tonsils. Decayed teeth are a well recognised cause of enlargement of the cervical glands, but it would be well to recognise that they may also be a contributory cause to chronic inflammation of the tonsils. I very often advise parents of children who suffer from *both* decayed teeth and enlarged tonsils to have the teeth attended to first, in the hope that the tonsils may atrophy later (where serious interference with breathing is not of course present). I have seen this produce the hoped-for result in several cases; in any case it is, of course, a desirable thing to have sound teeth also, should an operation become necessary on the tonsils subsequently, as there is so much the less risk of infection."

Dr. Marjorie H. King reports :—

"As usual one found very large numbers of children suffering from this deformity. If obviously enlarged tonsils were accompanied by mouth breathing I recommended removal. If the tonsils were slightly enlarged and there were slight adenoid symptoms I advised a trial of breathing exercises.. When I found very large tonsils that 'gave no trouble' and are unaccompanied by nasal symptoms I recommend removal. It is interesting to note the marked improvement mentally and physically after successful operation. One hopes that eventually every operation will be of the successful variety as it is difficult to explain to a doubting parent the virtue of an operation that leaves a child no better than before.

"The number of above seemed to me to vary with the district. For instance infants in Port Sunlight had practically 100 per cent. enlarged tonsils while in West Kirby they are the exception."

Dental Disease.

During the year 5,182 children were inspected dentally. These children were in the age-group 5 to 8 years old inclusive with the exception of 197 special cases. Of this number 4,338 were found to need dental attention but only 2,337 accepted treatment. In addition to this number 1,363 children were re-treated during the year as the result of periodical examinations. The attendances made by the children treated numbered 5,026. In the case of 2,932 children fillings were done: there were 6,919 extractions done and 281 other operations. Local anæsthetics alone were used. Table IV. in the Appendix gives further details of this work.

Your Committee decided to appoint two more dental surgeons during the year so that approximately three-eighths of the County can be adequately dealt with under this heading. I append some remarks by the Assistant School Medical Officers.

Dr. A. V. Stocks writes :—

"As showing the effect of the work of the County Dentists it may be of interest to compare the results of the examination of the children in a very large school in Runcorn between 1922 and 1925. Children in the intermediate group (8 years of age) were selected, as these are just beginning to show the effects of the treatment carried out in the Infants' departments under the new dental scheme.

"Taking 171 children aged 8 during the years 1922-24 it was found that the average number of carious teeth per child was two. At the recent inspection at the beginning of 1925 133 children of this age were examined and the average number of decayed teeth per child had dropped to *half* what it was previously.. This means a lessening of the dental decay by half at a most important age through a very large school, and the figures would be better still but for the shortsightedness of some parents in not allowing their children to have the benefit of the treatment provided."

Dr. Marjorie A. Grant writes :—

"It has been interesting to compare the number of cases suffering from septic conditions of the teeth in schools where dental care is a recognised thing, with those schools where the fact that a School Dentist exists is unknown.

"In Springfield Council School, Sale, (Infants' Department), we find only 10 children out of over 100 examined where it was necessary to recommend dental treatment, and these we are informed being cases where treatment was offered and refused by the parents.

"In Adlington Council School where the nearest dentist is three miles away from the school, apart from a few cases of disordered digestion, etc., the Head Teacher informs us that frequently children are absent from school owing to dental abscesses, and toothache, etc. It is to be hoped that in the near future we shall have sufficient School Dentists to attend to the out of the way villages."

Mr. S. Whitworth, L.D.S., reports :—

"Generally speaking, the figures are very similar to those for the preceding year. The number of permanent fillings has increased and will continue to do so to a larger extent whilst the permanent extractions are remarkably low, the majority of these being in special cases treated by me.

"During the last year I have spent considerable time in dealing with the patients who had refused treatment. The manner I adopted was to send for the parents and discuss the question individually with each parent. I found that the chief reason for refusal was ignorance and when I had explained the reasons for treatment, in the majority of cases they were only too pleased to accept. One school in which I carried out this scheme we got over seventy mothers who originally refused to accept treatment. This in my opinion is very necessary pioneer work and once it has been done it will make for a smoother working generally. From the educational stand-point in my opinion, it has been most beneficial as I find parents often coming to see me now about children who do not come under the Scheme and asking advice, which goes to show that some interest is now being taken. The co-operation I have received from the Head Teachers in the schools has been of very great assistance. There are still certain schools where the advantages of the Scheme are not valued. On the other hand there are schools that I get requests from, asking when I am going to pay them a visit. These at present have to be turned down as I cannot possibly take on any more schools.

"The great difficulty this year has been the increasing number of children that I have to add to my lists. This, unless I have further assistance, will mean that I shall not be able to get round in the 12 months. If on the other hand certain schools are taken from me I shall be able to get round. In some schools my numbers are advanced from 100 to 200 more than the previous year.

"Another difficulty is the increasing number of permanent fillings which are now coming on with the increased age limit. These take longer than temporary fillings and in some cases need several visits.

"Generally speaking, there is a big improvement in the condition of the mouths where treatment has been done regularly since the Scheme was started and the children generally do not show the same amount of fear of the Dentist as they used to do."

Mr. H. R. Parry, L.D.S., appends the following report :—

"Number of children treated at the Clinic during the six months were	582
Number of children treated of other ages ...	58
Number of attendances made by these children ...	1074

The treatment carried out at the Clinics :—

Permanent teeth extracted	58
Temporary teeth extracted	2124
Total number of extractions	2182
Permanent teeth filled	67
Temporary teeth filled	500
Total number of fillings	567
Local anaesthetic	2182
Silver dressing of permanent teeth	10
Silver dressing of temporary teeth	48
Gum dressings	17
Scaling	23

"Above are figures of the work done by me during the last six months. At the three schools in Ellesmere Port I inspected only three ages but next year I hope to inspect four ages in all of the schools. At the above place I should say 90 per cent. of the mothers attended with the children and seemed quite pleased with the treatment. Runcorn and Hoylake schools were inspected in four age groups.

"I may add that in all the schools visited the Nurse and I were well received by the Head Teachers and their influence with the mothers and children proved of very great value in advising the children to attend the Clinics for treatment. They (the head teachers) were a very great help to us, and assisted us with the work tremendously by sending the children promptly at the appointed hour."

Mr. T. McClelland, L.D.S., reports as follows :—

"On completion of six months' service under the Education Committee, two great points stand out in my impressions, viz., the very great number of school children aged 5, 6 and 7 years of age with carious teeth and septic mouths, and, secondly, the appalling apathy or ignorance of the parents to the suffering of their children by caries, and later, abscessed teeth and roots pouring their septic toxins into the child's stomach, and their subsequent absorption into the child's system.

"The figures and statistics speak for themselves, the most regrettable feature being that children on attaining school age, in many cases, present dentitions ravaged by dental caries, there, it is not to be wondered that competent medical authorities estimate that at least 20 per cent. of the chronic diseases which afflict mankind, result from the diseased teeth and the septic condition of the mouth associated therewith.

"From my figures it will be seen that the number of children 5 years of age with conditions of oral sepsis is very considerable and in my opinion there is great scope for educational work on dietetic lines with a view to preventing dental caries in young children and the dissemination of the necessary knowledge under the following headings :—

I.—Diet in infancy and childhood in relation to the prevention of dental caries.

II.—Prevention of certain dietetic habits which tend to induce dental caries.

III.—The normal natural self-cleansing processes of the mouth and teeth.

IV.—Artificial methods of preventing dental caries.—tooth brush, tooth-paste, etc.

V.—Prevention and treatment of oral sepsis in expectant and nursing mothers.

"The diet in infancy and childhood is, in many cases, responsible for the present state of affairs, children in general receiving an abundance of soft '*pappy food*,' and not enough hard or fibrous food which stimulates the salivary flow and requires efficient mastication with the subsequent natural cleansing of the teeth. Meals are not arranged in a physiological manner, therefore, mastication is reduced to the minimum and there is an undue lodgment of highly refined carbohydrate food in the crevices and depressions of the teeth, giving full play to the inducement of caries. Were more attention paid to the diet of a child from the age of one year upwards, by feeding it on a suitable diet that would leave the mouth physiologically clean and healthy, by increasing the amount of foods of a fibrillar or fibrous character, which by stimulating efficient mastication and naturally cleansing the teeth, would also prevent the undue lodgment of bacteria and mixed foods which cause acid fermentation and caries. In many of the schools I have visited, children of all ages may be seen at the dinner hour eating the routine meal of bread and butter or jam, washed down by tea, etc., a meal calling for little masticatory effort, (these children live some distance from the school and have not the necessary time to go home for the meal), and from my observations habitually '*gulp*' or '*bolt*' their food, and on inspection present dentitions ravaged by caries.

"Until the present day dietetic irregularities are remedied, children on attaining school age will present carious dentitions and conditions of oral sepsis.

"The apathy of some parents towards treatment is to be regretted, they do not recognise the importance of sound teeth, dental caries, and oral sepsis, particularly with respect to the temporary dentition, to them such matters appear to be of trivial importance, the popular idea being that the so-called '*baby teeth*' require no attention whatever, except when they ache, or a '*gum-boil*' appears.

"However, I always endeavour to correct this fallacious idea by informal talks on the elementary causation of dental caries and oral sepsis, and I may say that in this matter I have had the hearty co-operation of teachers. In my area, only the schools in Nantwich have previously been visited by the School Dental Surgeon, so that next year on re-visiting schools

I have no doubt parents will consent to the treatment of their children in increased numbers, having realised the benefits to be derived.

"In all schools (excepting Nantwich and Sandbach) I have carried out the treatment necessary in the school and in this matter I am indebted to Head Teachers in providing the necessary accommodation for carrying out treatment with the least possible interference with the routine work of the school.

"Regarding my figures and statistics, the ratio of extractions to fillings is a high one, but I would point out that the children in the schools in my area have not previously received dental treatment, and through utter neglect of the teeth septic conditions abound, and teeth which have not been attended to at the proper time, present no scope for treatment other than by extraction, (though with respect to children coming within the age groups of 5, 6 and 7 years only three permanent teeth have been extracted). However, as children are re-inspected and treated yearly, the position will be reversed and the ratio of fillings to extractions will increase.

"With respect to the dental cards sent to parents, I would suggest that the wording of them be altered, and added to, by some remarks upon the importance of the evils of oral sepsis in children."

Heart and Circulation.

Under this heading I have records of the following defects:

Organic heart disease	56 cases.
Functional heart disease	36 ,,
Anæmia	186 ,,

A special inquiry is being carried out at the time of writing this report on the extent and causes of organic heart trouble and its relation to conditions of the throat, teeth, rheumatic disorders, etc. Some preliminary investigations which have been made lead me to expect some interesting results.

Dr. Marjorie A. Grant offers the following observations on heart cases:—

"Of the heart cases examined last year, 72.2 per cent. of these were found to be 'functional' in origin—mostly due to anæmia, or cases of temporary heart weakness following epidemic diseases. In most of these cases a treatment of fresh air, good feeding and tonics will lead to rapid recovery. Twenty-five per cent. of the total were 'organic'—rheumatic in origin, following attacks of Rheumatic Fever or rheumatism in other forms, (Chorea, etc.) In these cases the children were forbidden drill, severe exercise, swimming, etc., and of course with the probable involvement of the heart valves, one could not promise so good a prognosis as in the former type. The rest of the cases, namely, 2.8 per cent., were congenital in origin."

Dr. Marjorie H. King reports :—

"Anaemia I found fairly common among the older girls. These girls, besides having upon them the strain of rapid growth and school work, have very frequently to put in hours of manual labour on going home after school hours as they have frequently younger brothers and sisters and the mothers expect much from the older ones. I found several cases of organic heart disease and the rheumatic history was almost invariable."

Tuberculosis.

Only one definite case of pulmonary tuberculosis is recorded, but there were 57 suspected cases referred for further examination and treatment. The following additional cases of tuberculosis were referred for treatment :—

Glands	55	cases.
Spine	5	,,
Hip disease	3	,,
Other bones and joints	2	,,
Skin	6	,,
Other forms	18	,,

Nervous System.

There were 10 cases of epilepsy discovered on medical inspection, with 25 cases of chorea (St. Vitus' dance) and two somewhat obscure cases which were marked for further observation.

Deformities.

Here one has recorded 9 cases of rickets, 10 cases of spinal curvature and 25 deformities of a minor nature.

Mental Deficiency.

The present number of feeble-minded children (not notifiable to the Local Authority under the Mental Deficiency Act) is as follows :—

Attending Certified Schools	17
Attending Public Elementary Schools ...	144
At no School or Institution	41

The following children were notified to the Local Authority during the year :—

Imbeciles	33
Idiots	6

The system adopted for diagnosing and classifying mental defectives is the Stanford revision of the Terman system under which the Intelligence Quotient of the child is ascertained (mental as compared with physical age).

Dr. Marjorie A. Grant offers the following observations :—

"Perhaps one of the most interesting features of the school medical inspection is the application of the Binet-Simon tests to children of doubtful mentality.

"In most cases the children brought before one are obviously feeble-minded, but in a few cases by the application of these tests, the children have been proved to be even better than normal in intelligence.

"The results would be very interesting if every Head Teacher were well versed in the application of such tests and applied these to all children in order to ascertain the mental age of the child with special regard to precocity or genius on the one hand, and mental deficiency on the other.

"In such a case the Intelligence Quotient of each child may be known, and this taken in conjunction with the Annual School-work Examination would be a good means of discovering whether bad work in the latter were due to laziness, or inability to learn. The standardisation of such children would materially help in the teaching of them, leading to greater sympathy and understanding between teachers and child.

"The extremes, mental defectiveness, and precocious children, may be placed before the School Medical Officer annually and the feeble-minded removed if possible, without delay to Special Schools.

"This seems rather beyond the realm of medicine, but in the future, I am sure that such methods will become more and more recognised to the advantage of the nation."

Dr. Marjorie H. King reports :—

"The provision for the treatment of mentally defective children is unsatisfactory. I find that in practically every village school there are one or two children unteachable by the ordinary methods and who would benefit greatly by special instruction, but the special school accommodation is very limited, and until this is remedied very little can be done."

Enlargement of the Thyroid Gland.

I append herewith the results of a special inquiry into the prevalence of enlargement of the thyroid gland—a condition usually known as Goitre or 'Derbyshire neck.' The thyroid gland is said by the highest authorities to be the regulator of most of the functions of the body both physical and mental and when it is not itself functioning properly the whole of the system may, as a consequence, be more or less deranged.

	No. of Children examined. M.	F.		Thyroid enlargement present in M.	F.		Total.
Dr. McIvor, S. W. Cheshire ...	925	1004	...	93	169	...	262
Dr. A. V. Stocks N. E. Cheshire ...	428	456	...	18	59	...	77
Dr. Marjorie A. Grant, Mid-Cheshire ...	967	1268	...	2	39	...	41
Dr. Marjorie King, W. Cheshire ...	660	669	...	48	143	...	191
Totals ...	2980	3397	...	161	410	...	571

The children examined were all of the age of 12 years.

That nearly nine per cent. of these children should shew perceptible enlargement of the thyroid gland is remarkable.

I append the remarks of some of the Assistant School Medical Officers on the matter :—

Dr. A. V. Stocks :—

"Taking the results of examining 2,508 children during the year the following summary may be made :—

Age.		Percentage of Boys showing enlarged Thyroid.		Percentage of Girls showing enlarged Thyroid.
8	...	2·3	...	2·5
11	...	3·4	...	13·
12	...	4·2	...	13·
13	...	4·0	...	16·

"These figures clearly show that the condition becomes much more common as adolescence approaches, and also that the condition, while almost equally common amongst boys and girls at the age of 8 years, becomes very much more common amongst girls than amongst boys as puberty approaches.

"If, as appears from recent work in Switzerland, the presence of goitre is associated with a deficiency of iodine in the diet, it would seem to be worth while trying the effect of 'iodised table salt' in the districts where enlarged thyroid is most common, as recommended by the late County Medical Officer of Health for Derbyshire in a recent paper on the subject.

"I have already recommended a number of parents of children with slight goitre to try the effects of using this salt in place of the ordinary table salt."

Dr. Marjorie Grant :—

"None of these cases showed palpitation of the heart, tachycardia, exopthalmos, tremor of the hands, or valvular trouble of the heart.

"Two cases shewed mechanical obstruction to the neck by difficulty in swallowing.

"Two cases were small adenoma of the thyroid, all the rest were a more or less uniform enlargement of the gland."

Dr. W. J. McIvor :—

"Among 1,929 children medically examined at routine inspections during the past twelve months, and who were 12 years old, 262 had obvious enlargement of the thyroid gland. This amounts to a percentage at that age of about 13.5 for both sexes. Two years ago I found the incidence for children of all ages of both sexes slightly greater. This is due, I believe, to the inclusion among the latter figure of children up to age of 14 or more."

Crippled Children.

Children suffering from paralysis, severe heart disease, &c., other than those with active tuberculosis, form a fairly large proportion of those who require Institutional care.

Two are in Certified Hospital Schools.

No fewer than 108 are attending public elementary schools and 27 are at no school or Institution.

Delicate Children.

This group includes children suffering from pre—or latent tuberculosis, malnutrition, debility, anaemia, etc.—the class of child for whom the Open-air School offers the best and sometimes the only chance of salvation from permanent disability as a useful citizen of the future. The provision made for this class is shewn in the following statement :—

At Certified Residential Open-air Schools ...	15
At Certified Day Open-air Schools	0
Attending Public Elementary Schools	285
At no School or Institution	39

This means that during the year 1924 there were 324 children in need of treatment on open-air lines for one or other debilitating condition. The argument for the establishment of open-air schools does not appear to need any further strengthening than this.

Re-examinations.

Dr. A. V. Stocks submits the following observations on the cases which came under his notice :—

"The number of children in whom defects had been previously found and who were re-examined during 1924 was 1,004.

"Special reference may perhaps be directed to the results of following up 138 cases of tonsils and adenoids during the last year or two.

"Of this number, 75 (or 64 per cent.), had been successfully operated on as a result of recommendations made to the parents, with the following marked beneficial results (the notes being the result of comparison between the condition on re-examination and before operation) :—

Hearing : deafness or impaired hearing cured in 19 cases and improved in six more cases.

Speech defects cured or improved in 13 (*i.e.*, thick or nasal voice), and stammering cured in one.

School work reported as much improved in three, one of whom had been put up two standards as a result.

Enlarged glands had subsided entirely in two cases, otorrhœa had ceased in two children, recurrent tonsillitis in one, and rheumatic pains had ceased in another child. Other results included better sleep, improved nutrition, better shape of chest, fewer colds and cessation of earache : also improved habits of breathing in the great majority.

"Of the remaining 63 not operated upon, nine had been treated in other ways, some with benefit. In two cases the family doctor advised against operative measures. in 18 children the condition had improved since the last examination and further action was postponed, whilst in 31 no action had been taken and there was no improvement, deafness and other defects remaining unchanged."

Special Examinations.

A large number of children have been examined for Employment Act certificates, for swimming instruction and for visits to Wembley. On other occasions special examinations or consultations with the patients' own doctor have been arranged.

Comparison between Town and Country Children.

Dr. Marjorie H. King offers the following interesting observations on this subject :—

"I do not think that on the whole the condition of the country child compares favourably with that of the town children. The rosy-faced chubby country child is conspicuous by its absence. Instead we find children who are commonly pale, thin and tired-looking. We can suggest several reasons for this. For one thing the more or less picturesque country cottages are usually far from ideal for the rearing of healthy children. Their sanitation and ventilation leave much to be desired. Overcrowding is very general and the older cottages are often vermin-ridden. Of course the above is also true of many of the slum areas of industrial towns. but there are probably fewer slums to the town than there are unsatisfactory cottages to the country. Another point I suggest is that in an area where the majority of villages send their milk, butter and eggs to the large towns there is not always left the supply sufficient for the villagers themselves. Yet another factor that seriously affects the condition of children attending rural schools is the large size of the areas drained by these schools. The children have frequently several miles to walk to school. They have to leave home early with probably a hasty breakfast. They walk in all weathers with sometimes unsatisfactory clothing and footgear. They bring a lunch of sorts to school and this has to keep them going until they return home in the evening. The cloakrooms in many of the small schools have no heating arrangements for drying any wet clothing. I append later a few further remarks *re* this taking of light lunches in school.

"I have found a great difference between the state of cleanliness of the town children and that of the village children. The latter are very much cleaner. In the town one met very regularly severe cases of impetigo capitis due to infestation by head lice. In my area of this County I can only recollect finding two such cases. Here I find head lice very much the exception. Then here body lice are extremely rare, two or three cases in the year. Among the industrial town children they were unfortunately very common indeed."

The Dinner Hour in Rural Schools.

Dr. Marjorie H. King has also some useful comments to make on this subject. She writes:—

"My area contains many small schools. The children attending these are usually drawn from a wide and scattered area and have to walk several miles to school. These children cannot go home for mid-day dinner and usually bring a so-called dinner with them. This in most cases is unsatisfactory. Teachers frequently bring children to me suffering from what they call debility and ask me the cause. On questioning such children one finds that frequently the main article in their diet is bread. They start the day with tea, bread and butter or margarine. They bring bread and jam or butter or margarine to school for lunch. They go home to a tea which is frequently the last meal in the day and which in the poorer homes contains no sustaining food. Naturally such children are ill-nourished.

"In some of the schools efforts are being made to improve this state of affairs. In one school (Malpas) hot dinners are supplied by a villager who makes a small charge to meet the cost. At another school (Helsby C.E.) the teachers see to the provision of cocoa or hot milk. This is very satisfactory. Of course any arrangement such as the above takes a few minutes from the teachers' lunch interval, but the supervision could be taken in turn or put into the hands of the older children. I beg to suggest that if such arrangements could become somehow more general it is certain there would be a noticeable improvement in the health of these children."

Medical and other Treatment.

In the Appendix (Table IV., Groups I. to V.) your Committee will find the details of treatment secured for defective children either under schemes assisted by you or by private or other agencies. Briefly summarised the treatment so secured may be stated as under:—

	Cases Treated. Under Authority's Scheme.	Otherwise.
Minor Ailments (excluding uncleanliness) ...	1566	392
Defective Vision and Squint	1382	245
Spectacles provided	665	204
Nose and Throat—		
(a) Operative treatment	196	99
(b) Other forms of treatment	324	619
Dental Defects—		
(a) Treated	2337	—
(b) Re treated	1363	—
Uncleanliness and Verminous Conditions—		
(a) No. of children examined	140368	
(b) No. of children found unclean ...	4531	

These figures shew the really effective work of the school medical inspection scheme and I think the results are gratifying.

School Clinics.

I append the reports of two of the Assistant School Medical Officers on these Clinics. Dr. Marjorie A. Grant reports :—

"Much beneficial work has been done by the Nurses at the Sale School Clinic. Every morning the nurses starting well before 9 o'clock have treated a large number of cases of impetigo, conjunctivitis, burns, wounds, ringworm, etc., with excellent results.

"It has also been a centre where the nurses have been able to make an appointment with the parents and the School Doctor in suspected cases of enlarged tonsils and adenoids, enlargement of the thyroid or other defects.

An interesting case.—"At the Stamford Park Council School (Infants' Department) I had brought before me for medical examination the following case :—

"A girl aged 8, 2½ feet in height, with extremely small limbs, hands and feet. By the size of the child one would have judged its age to be three years or so, especially as standing beside her was her younger brother, 5 years old, holding his elder sister by the hand, but over a head taller. The face of the girl was small and about 8 years in age. On examination there were no signs of cretinism, rickets or tuberculosis. The abdomen was protruberant and on questioning the mother we were informed that the child passed two or three motions a day, consisting of large pale, fatty stools. The child has been under medical attention but never to a children's specialist or Hospital.

"We diagnosed the case as one of 'coeliac disease,' and advised the parents to take her to a children's specialist. This was done and on following up the case we understood that Dr.

Lapage examined her and that she has been exhibited as coeliac disease in several Hospitals and Clinical Lectures."

Dr. A. V. Stocks reports :—

"Fifty-nine visits were paid to these Clinics during the year and 696 children were personally seen by me and the treatment supervised on these occasions. I formed the impression that the work of the School Nurses at these Clinics was being carefully and efficiently done, with much resulting benefit to the children and to the schools.

"Head Teachers on the whole appreciate what is being done: to retain their good will it is however necessary that children should not be retained an unduly long time on the mornings they attend. The marking of the time of leaving the Clinic on the new cards has been appreciated by the teachers.

"In addition to the notes on several remedies in last year's report I might say that we have found Resinol ointment to be of considerable value in treating minor cases of eczema and intertrigo.

"It has been possible to supervise cases of ringworm much more effectively since the Clinics were started.

"Much valuable work has been done in cases of impetigo, blepharitis and septic conditions of a minor character."

Physical Training.

The following report has been prepared by Miss Altham and Mr. Hall but has not, at the time of going to press, been considered by the Committee concerned :—

"During the past two years the Inspectors of Physical Training have been chiefly employed upon a tour of inspection of all the schools in the County, seeing the work done in the various branches of physical training, and rendering special reports upon the work seen in each of the sixteen Administrative Sub-Committee districts. These reports, in addition to commenting upon the work done, contained a summary of general recommendations, and were circulated to all schools concerned, heads of departments being requested later to report as to what action had been taken to give effect to these recommendations. In practically all schools efforts have been made to adopt those recommendations which were not previously in force. At the conclusion of the inspectors' visits to the schools in each district, special demonstrations were arranged for the teachers, at which, the work of the district was specially dealt with. Practical demonstrations were given with classes of children, and there was a talk to the teachers in which the work of the district was reviewed and suggestions given for the improvement of existing weak features. The demonstrations were concluded by open discussion and teachers were invited to ask questions and present their difficulties. The attendances at these demonstrations were highly satisfactory, and showed the keen interest the teachers have in the subject.

"Throughout the County there is abundant evidence of increased interest in physical training generally, and the value of the subject both physically, mentally and morally is more fully realised. The children in a great majority of classes, show a very happy spirit, work eagerly, and have a genuine interest in their lessons. The quality of instruction given is very varied, but is generally satisfactory, and teachers welcome advice and suggestions from the inspectors. There is a genuine desire for Teachers' Classes in all parts of the County, and much good work might be done through such classes, not only as regards the technique of formal exercises, but in the organisation of games, folk-dancing and swimming. It is proposed to arrange teachers' classes in several centres in the County in the near future, and demonstrations for teachers in the more remote and isolated rural schools.

"Lessons are now receiving much more thorough preparation by the teachers and in very many cases the syllabus and notes of lessons are dispensed with during actual instruction. More attention should be given to general 'activity work, especially as regards correct marching, running and jumping.

"The work done in the Infant classes is very satisfactory, and though a few teachers have a tendency to make the work too formal and restricted, the majority interpret the Board of Education Syllabus in the right spirit, with the result that the children are alert, happy and independent.

"Many more schools now arrange a weekly period for organised games. There has been a steady increase in the number of school playing-fields, while many schools which cannot obtain suitable playing-field accommodation, now conduct the organised games period in the playground. Though much interest is displayed in games generally, it is thought that more benefit would be derived from the games period in the majority of schools by a more definite organisation of the games, the fuller development of the team system and the use of team leaders, and the introduction of more and varied competitive inter-team games and athletic contests forming part of a definite games scheme.

"During the past two years there have been considerable improvements made with regard to the surface of many playgrounds, but there are still a few schools which possess playgrounds, the surfaces of which prove a handicap to general activity work.

"There has been a marked improvement in the footwear of the children in many schools. Very successful efforts have been made by a number of teachers to encourage the children to bring suitable shoes for wear during actual lessons, but it is felt that still more might be accomplished in this direction in many classes. The number of girls who wear a suitable dress such as that recommended in the Board of Education Syllabus, is only fairly satisfactory, and it is thought that, if the advantages of such a dress were explained by the teachers to both the girls and their parents, a greater improvement in girls' dress would be forthcoming.

"A large number of schools now include folk-dancing as part of their physical training scheme, and in spite of a lack of good facilities in many schools the enthusiasm of the teachers has enabled them to achieve a fair amount of success. This branch of physical training is now being taught to boys as well as girls in a few schools. Several schools have provided themselves with gramophones and dance records for use in the playground, thus allowing of good out door work, when inside facilities are poor. There is little doubt that if teachers had better facilities for attending classes in this subject, there would be a marked improvement in the standard of the work, and more schools would introduce folk-dancing as part of their physical training.

"The organisation of swimming has recently received special attention, and wherever possible, arrangements are being made to give swimming instruction at local swimming baths. In one district children from rural schools are conveyed by road to the nearest swimming bath. The progress made by all children is now being recorded and certificates for proficiency are to be awarded.

"The work done by the teachers in the various Schools' Athletic Associations in the County is well worthy of mention. In all districts there has been greater interest taken in the relationship between schools as regards games, especially for boys. Schools' football and cricket leagues have been organised in the urban districts, while in the rural districts occasional inter-school games have been arranged. Many district representative teams have been entered in various schoolboy competitions and have met with considerable success, two boys from the County Elementary Schools having gained schoolboy international honours during the past football season."

Secondary Schools.

There is very little to report in this connection. There were 1,402 boys and girls inspected—806 boys and 596 girls.

The principal defects discovered were dental disease (264 cases) and defects of vision (152 cases). There were 41 cases of deformity such as spinal curvature brought to light.

No difficulty whatever has been experienced in having the majority of the defects remedied.

APPENDIX I.

Report on the Nutrition of Children in Rural Schools in Cheshire.

By Dr. A. V. Stocks.

During 1925 special investigations were made at six typical rural schools in the County with the object of throwing some light upon the prevalence and the causes of malnutrition among school children attending rural schools. Before considering the results of these investigations it may be useful to give some facts relating to the same problem in a more general way and having reference to a larger number of children in the same County.

Nutrition of Town and Rural Children compared.

The medical record cards of 3,755 children examined during 1922-23 show the following results:—

Out of 1,055 children in rural schools 42 were found to be suffering from malnutrition, or 4 per cent., while in town schools in the same County 166 out of 2,700 children were suffering from malnutrition, or 6.1 per cent.

The rural children would therefore seem to be the better nourished in this County.

Anæmia appears to be more prevalent among rural than among town children, heart disease to be equally prevalent in both, while rickets, as might be expected, is twice as common in its later manifestations among town children as among the rural school children. Tuberculosis in its various forms appears to be rather more common in the town children.

Physique of Town and Rural Children compared.

An investigation into the weights of children aged 8 years in 1922 was recently undertaken from records, so as to compare the town with the rural child.

From thirty small rural schools the children aged 8 in that year were selected: these numbered 224. A similar number aged 8 were taken from five large town schools. All the schools are in Cheshire.

They were then classed according to their weights in different groups and the figures reduced to percentages.

Percentage of Children.

	Below 40 lbs. weight.	Between 41 and 45 lbs.	Between 46 and 50 lbs.	Between 51 and 56 lbs.	Between 56 and 60 lbs.	Over 60 lbs.
Rural ..	0·9	4·5	24·5	23·5	23	23
Town...	0·9	12	28	30·	20	9

These figures may be summarised more briefly as follows:

Percentage of Children.

	Below 51 lbs. weight.	51 lbs. and above.
Rural	30 ...	70
Town	41 ...	59

These figures, so far as they go, show a superiority of the rural school child of eight years of age over the town child of the same age.

Special Investigation of Six Rural Schools.

Summary.

Number of children present at time of visit, 383.

State of Nutrition	Excellent ...	8 per cent.
	Good ...	57 ,,
	Fairly Good ...	20 ,,
	Fair ...	8 ,,
	Poor ...	6 ,,
State of Clothing	Good ...	87 ,,
	Fair ...	10 ,,
	Poor ...	3 ,,

Children walking one mile and over from home to school, 60 per cent.

Mid-day Meals ..	At home ...	42 per cent.
	At school ...	58 ,,

Character of mid-day meal unsatisfactory (apparently consisting of carbo-hydrate food in the main and lacking variety and vitamines) in 25 per cent. of those who stayed dinner at school. This excludes those who appeared to have a cooked meal to go home to after school.

Home conditions reported as unsatisfactory in 9 per cent. of the children; fair in 6 per cent. of the children.

(1) Taking only the children whose nutrition is poor it is noteworthy that their clothing is entered as fairly good in 30 per cent.; poor in 25 per cent.; and "good" in the rest:

whereas amongst the whole of the 383 children the clothing is, as stated above, noted as being fairly good in 10 per cent.; poor in 3 per cent.; and "good" in the rest.

This (if clothing is a criterion of home conditions) seems to show a distinct connection between poor nutrition and unsatisfactory home conditions.

Again, the percentage of children of poor nutrition who stay for their mid-day meal at school is 46 per cent., almost the same figure as the percentage of *all* children who stay (42 per cent., as stated above). From this it would seem that staying at school for dinner is not a principal cause of the poor nutrition of these particular children.

The home conditions of these cases of malnutrition is described as fair in 22 per cent.; poor in 30 per cent.; whereas (as stated above) the figures for the whole 383 were fair in 6 per cent.; poor in 9 per cent.

This corroborates the results of taking the clothing, given above, in that home conditions appear to be the causal factor.

(2) In addition to evidence under (1) the following analysis is of some interest:—

NUTRITION.

	Good.	Fair.	Poor.
	All in Percentages.		
Children who go home for dinner, numbering 160 ...	73	20	7
Children who stay at School for dinner, numbering 223 ...	60	35	6
Children who have a satisfactory meal at school or on arriving home, 170	58	36	6
Children having an unsatisfactory mid-day meal at school, 54 ...	66	30	4

There is nothing in these figures to indicate that the taking of the mid-day meal at the school is the chief factor in causing poor nutrition.

At five out of the six schools provision was made for hot drinks for the children, and the same provision had been made formerly at the other school but had been discontinued owing to lack of a large kettle in proper repair.

In my opinion the provision of hot water to make cocoa, tea, etc., for the scholars is an important matter in rural schools, where the children have not only a long way to walk but a more or less unsatisfactory mid-day meal (even under the best of conditions obtaining in most of these schools).

I made this suggestion four years ago and it will be found on page 23 of the Report of the Chief School Medical Officer for Cheshire for 1920. A large iron kettle fitted with a tap should in my opinion form a part of the equipment of all small rural schools where no cooking range or other facility exists. Such a kettle can be left on the top of the class-room stove during the morning session so as to be ready for noon. This is done at a number of rural schools, but not at all of them, unfortunately.

To throw some light upon the question as to whether prevailing conditions of unemployment are adversely affecting the physique of the school children a small investigation was made in Runcorn, the weights of 152 children being compared as follows:—

Average weight of a child of 8 years of age in 1922 (average of 76), 52.7 lbs.

Average weight of a child of 8 years of age in 1925 (average of 76), 53.1 lbs.

All the children were from the same school.

The girls showed a slight average increase of weight and the boys a very slight average decrease.

So far as it goes this does not seem to show any adverse effect of continued unemployment upon the physique of the children generally at this school.

The following scheme has been in operation for providing dinners for school children at Gawsworth, near Macclesfield, for twenty years.

There is a well equipped dining hall containing cooking stove and all necessary appliances, tables, trestles, etc.

The buying of the food is left in the hands of the cook, who keeps simple accounts of the money received and spent.

The average number of meals supplied each day is about 50 and the cost to each scholar is twopence for the meal.

The cook is also the caretaker, and she receives £40 a year from the dinner scheme for her work as cook.

Much support is given by the farmers who recognise the great benefits which the scheme confers upon them and their children. Most of the vegetables and some of the potatoes are given, which aids in keeping the cost so low.

The scheme is worked by the school staff and there has been no day without a hot dinner in twenty years.

The older girls in rotation assist the cook, whose hours are from 8-30 a.m. to 2-30 p.m.

Typical menu for a week :—

Monday—Boiled jam rolls and milk pudding.

Tuesday—Fried potatoes and Yorkshire pudding.

Wednesday—Hot pot and milk pudding.

Thursday—Cold beef with two vegetables and milk pudding.

Friday—Sausages and mashed potatoes and milk pudding.

The scheme is self-supporting with 60 children, but shows a few pounds deficiency with 50 as an average number staying for dinner; this is made up by a small effort at the year end.

In connection with this subject the following scheme which has recently been started at Daresbury school for providing school dinners at a cheap rate for the children may be of interest; it has just come to my notice.

The children pay fivepence a dinner, paying either weekly or daily. Accounts are kept and bills paid by the girls of the top class. The school caretaker is the cook, and is paid ten shillings a week extra for this.

Only English fresh meat is used.

Up to the present the dinners have shown a small profit.

About 30 children per day stay dinner.

Menus :—

The following indicates the type of dinner supplied :—

Monday—Irish stew, suet pudding.

Tuesday—Hot pot, rice pudding.

Wednesday—Cottage pie, currant pudding.

Thursday—Hashed meat, rice pudding.

Friday—Stew and vegetables, boiled pudding.

The children were weighed on March 7th and again on May 6th, after having the dinners two months. The following are the results:—

Child.	March 7th. lbs.	May 6th. lbs.
R.F.	82	84
A.P.	63	66
D T.	72	74½
A.P.	66	66¾
J.P.	67	67½
J.E.	70¼	70¾
J.D.	71	73
F.F.	56	58½
W.G.	95	100
D.G.	73½	74
G.P.	73	79
M.B.	74	76½
E.G.	74½	77½
A.A.	71½	74
P.B.	66	66

Other children had left or were absent at one or other date. Average gain in weight = 2¼ lbs.

APPENDIX II.

The Prevention of Rheumatic Heart Disease.

By Dr. W. J. McIvor.

In voicing my own views in opposition at times, I fear, to those of more distinguished colleagues, I can at least offer in mitigation the request, in Sir George Newman's report on the health of the school child, for further information into the incidence of disease among children under five years, the prevention of adenoids and enlarged tonsils, and the character, incidence and prevention of rheumatism in children. It is proved to my own satisfaction at any rate, that there is an element that enters into the causation of all the above, and which will be disclosed in the following notes on the prevention of rheumatic heart disease.

A Bradshaw lecture on the subject by Dr. Poynton is published in the number of the British Medical Journal of November 29th last, and it is also dealt with editorially. I mention these facts from a desire to quote my own experience as an Assistant School Medical Officer in Cheshire which coincides startlingly with Dr. Poynton's in the Metropolis.

"The magnitude and importance of the problem have been overshadowed—partly no doubt, by the consideration given to other scourges of the public health, and in addition from the belief that nothing in the way of preventative measures was likely to be of any avail."

"However it has been too often forgotten that organic heart disease occupies the unenviable position at the head of the list of causes of death in this country."

Rheumatic heart disease occasioned the majority of the rejections of recruits during the Great War, and contributes largely to the danger of our deserving the title of a C 3 nation. Described as the chief cause of crippling in childhood, personally I find it to be the chief cause of malnutrition, but I would like to discuss the matter under a few separate headings.

Prevalence of Rheumatism.—Thought even yet to be endemic in certain areas, my own figures provide proof to the contrary. It is equally common in urban and rural districts, in hilly and low-lying country. 'Of growing significance in every civilised country' it may well be considered pandemic.

It will be admitted that it may assume an epidemic character at times, and give evidence of its powers of infection.

Incidence of Chorea in Children.—My experience of the frequency of this early manifestation of acute rheumatism led me to report in 1920, and in 1921, ten per cent. of the children attending public elementary schools in this category, from my area in Cheshire, a portion that embraces parts 'as flat as a pancake' and on the other hand includes the highland moors that tower over Macclesfield.

I have Dr. Poynton's authority for the statement that nine per cent. of the out-of-school children in London in 1923 were suffering from chorea.

"As the invasion of the body by acute rheumatism is, for all practical purposes, synonymous with invasion of the heart," every child should be examined at routine medical inspections for the physical signs of St. Vitus's Dance.

It is well-known that the tongue will reveal the choreic state of the nervous system by its involuntary movements when it is partially protruded and when other muscles are relaxed.

It is a mistake to expect to see typical Sydenham's chorea involving the skeletal muscles often, though this may develop later, or may have been noticed at times in the past.

Ages of Incidence.—To quote from Dr. Poynton's lecture, "The period of school life is by far the most important for acute rheumatism in this country: the incidence of the disease rises rapidly after the fifth year to about the tenth, and chorea, which I have seen as early as nine months, and occasionally in the second year, comes now to the front."

"It follows that the school medical service must take an ever-increasing share in the problem of prevention." My own view is that chorea with involvement of the heart occurs generally before five years of age, having had the opportunity in large schools of seeing many under that age and finding my usual 10 per cent. of sufferers approximately correct. Those discovered at later years, of course, may really have had earlier attacks. I shall mention this later under predisposing causes.

To quote again in reference to chorea, "This manifestation is a very interesting one, for, on account of the peculiar movements, it becomes the most sensitive clinical index we have of active rheumatism: it is also the manifestation which most frequently occurs alone and it has a very striking sex incidence."

Dr. Poynton refers to the generally accepted view that the incidence of rheumatism is higher in females. Here I may say that my figures only show a very slight increase in the case of girls at puberty, and in this area we have about 15 per cent. of obviously enlarged thyroid glands among children of all ages, mostly examples of hypo-thyroidism, also presenting clinical signs of cardiac involvement, such as a functional mitral systolic murmur, a thrill, or evidence of anaemia, a combination liable to be misinterpreted, which I have endeavoured, with the aid of other data, to exclude from the figures showing incidence of rheumatism.

Predisposing Factors.—It is generally admitted that one of these is constituted by the hereditary disposition to rheumatism, and corroboration of the diagnosis in the case of a child by the parent is sometimes almost heart-rending. From many examples I will only inflict the following. Having completed my examination of a child in the presence of her mother and come to the conclusion that the former was suffering from acute rheumatism, I asked the mother if her branch of the family tree suffered from rheumatic fever. My question elicited the startling reply that her brother died at the age of 18 years of a rheumatic heart.

As regards the influence of environment in the production of rheumatism, "more information is required regarding the relation of the disease to poverty, density of population, damp, airless and sunless dwellings, proximity to water courses, nature of soil, climatic conditions, heredity, and, more especially in regard to chorea, with nerve strain."

As regards environment I would like to publish the result of my own observations in Cheshire. Briefly I find a positive correlation between the stigmata of rickets and that of acute rheumatism, a factor in my opinion, worthy of further investigation, indicating a field of operation for preventive medicine, and an asset in the cure of rheumatic infection. It will be noted that if this is the predisposing cause, it definitely operates ante-natally, and during the first years of infancy, whence an early onset of rheumatism might well be expected.

The rickety spine, cranium, maxillae and teeth can be readily noted in routine examination. So often have I found this accompanying feature, that I would almost hesitate to diagnose a rheumatic condition in its absence.

This may explain the benefits gained by use of recovery hospitals, such as "the gains in weight, absence of attacks of rheumatism, improved physique, and happiness of the children who are continuing their education, and living and sleeping in the open air."

At this point, I would like to draw attention to Professor and Mrs. Mellanby's work on Rickets. A lecture by them is published in the British Medical Journal dated April 25th, 1925, page 891.

To quote again, "Cod-liver oil and fish oils, milk, suet, butter, eggs and cheese, are anti-rachitic, especially the first of these."

The value of ultra-violet light, failing natural sunlight, is emphasised—"In all this we see a ray of hope for the future.

The Diagnosis of Rheumatic Heart Disease.—Assuming that there have been noted the physical signs and symptoms alluded to above, such as the presence of cholera and rachitic stigmata, we come to some of the other features of the malady. First to be noted is the malnutrition. In my experience the subjects are practically all undersized, namely, small, short, thin, or merely slender and perhaps tall, and often pale, at the same time.

A grave problem arises from the combination of a brilliant mentality in these children with a debilitating complaint; for they represent the future brains of this country. I am told often that they are no trouble to teach: and how they generally do not like running about or joining in games much, but prefer to sit at home, and read for a scholarship. This may well constitute a vicious circle. Dr. Poynton similarly says:—

"I see in chorea the danger to delicate sensitive rheumatic children, of the great national system of education framed by adults." The process of education begins very young and the routine is a strain upon constitutions of which we may truly say, "the spirit indeed is willing but the flesh is weak." The rheumatic child is bright and eager, but cannot last the course, for she is lacking in stamina. Routine on the one hand, and a constitution on the other that requires frequent rests must clash and not infrequently does, *e.g.*, over scholarships. I believe there is a gradual lowering in general vitality and then the infection attacks first the nervous system, which is the most strained, and often also the heart and other organs.

Examination of Heart.—There is no need to enumerate well-known classical signs of disease of this organ. Among children mitral stenosis when established is the gravest form of organic heart disease; it is also the most frequently encountered. As an aid in its detection as early as possible, I personally find that the heart will show a mitral systolic murmur, and often the presystolic merging into it, if the unaided ear is applied to a layer or two of thin clothing over the heart; at the same time the ear will be struck by the exceptional force of the apex beat, indicating the hypertrophy usually present, and accurately timing the period of the murmurs. The stethoscope alone may miss everything. At this juncture I would like to allude to some distinctions between a rheumatic heart affection, and that due to pneumo-coccal infection, which is rarer, generally better compensated, and not likely to be progressive.

I allude to the concomitant physical signs in the lungs of old trouble, and the history of a former attack of pleurisy or pneumonia, the absence of chorea or of family or personal history of rheumatism.

Subjective Symptoms.—We all know the belief of the general public in the existence of "growing pains," a belief that is happily dying out; but evidence can often be obtained from a mere infant as to the existence of these or of pain of cardiac origin and the effort tolerance syndrome by tactful enquiries, and the use of partially leading questions, so long as the latter induce further revelations.

May I give an example—I ask, as tactfully as possible, "Do you ever get pains anywhere." The answer may be, "Yes, in my stomach," or the child may say "No," when it would be justifiable to say, "Would you not get a pain if you ran a long way," the answer then may be, "I don't like running," or "Oh, yes, I forgot, I get a pain here."

The questions may be varied indefinitely, and I place considerable value on the information obtained from these uncannily bright children. By the way the pain is often referred to the right side over the liver for some reason; my colleague, Dr. Stocks, suggests diaphragmatic rheumatism as a cause.

Treatment.—In the absence of recovery hospitals, which are absolutely necessary for the poorer population, "prolonged rest occasionally and intermittent rest frequently are needed."

In school medical work in addition one concentrates on defects of the teeth, naso-pharyngeal affections, and logically on treatment of rickets in my own cases.

These children are kept under observation, followed up, advised as to the amount of exercise which is beneficial, and finally as to the choice of a future career, and of their personal limitations.

I am sure Dr. Poynton's observations cannot fail to appeal strongly to the imagination and sympathies of everyone.

APPENDIX I.

STATISTICAL TABLES.

Public Elementary Schools.

Table I.—Return of Medical Inspections.

(A.) Routine Medical Inspections.

Number of Code Groups Inspections—	
Entrants	6501
Intermediates	5906
Leavers	6799
Total ...	19206
Number of other Routine Inspections ...	119

(B.) Other Inspections.

Number of Special Inspections	*6830
Number of Re-inspections	4478
Total ...	11308

* Includes examinations of children going to Wembley Exhibition.

Table II.

(A.) Return of Defects found by Medical Inspection in the year ended 31st December, 1924.

DEFECT OR DISEASE.	Routine Inspections. No. of Defects requiring Treatment.	Special Inspections. No. of Defects requiring Treatment.
MALNUTRITION	35	4
UNCLEANLINESS	625	101
SKIN—		
Ringworm—		
Scalp	52	124
Body	4	69
Scabies	36	49
Impetigo	139	854
Other Diseases (Non-Tuberculous)	49	28
EYE—		
Blepharitis	160	220
Conjunctivitis	25	56
Keratitis	—	81
Corneal Opacities	—	10
Defective Vision (excluding Squint)	1367	1006
Squint	60	425
Other Conditions	1	83
EAR—		
Defective Hearing	102	11
Otitis Media	114	15
Other Ear Diseases	3	6
NOSE AND THROAT—		
Enlarged Tonsils only	245	13
Adenoids only	196	17
Enlarged Tonsils & Adenoids	509	51
Other Conditions	127	15
ENLARGED CERVICAL GLANDS (Non-Tuberculous)	43	24
DEFECTIVE SPEECH	7	8
TEETH—Dental Diseases	2085	106
HEART AND CIRCULATION—		
Heart Disease—		
Organic	52	4
Functional	34	2
Anæmia	177	9
LUNGS—		
Bronchitis	158	4
Other Non-Tuberculous Diseases	7	0
TUBERCULOSIS—		
Pulmonary—		
Definite	1	0
Suspected	48	9
Non-pulmonary—		
Glands	45	10
Spine	2	3
Hip	2	1
Other Bones and Joints	1	1
Skin	5	1
Other Forms	14	4
NERVOUS SYSTEM—		
Epilepsy	4	6
Chorea	21	4
Other Conditions	2	0
DEFORMITIES—		
Rickets	9	0
Spinal Curvature	8	2
Other Forms	23	2
OTHER DEFECTS AND DISEASES	137	53

(B.) Number of individual Children found at Routine Medical Inspection to require Treatment (excluding Uncleanliness and Dental Diseases).

	Number of Children.		Percentage of Children found to require Treatment.
	Inspected.	Found to require Treatment.	
Code Groups –			
Entrants	6501	1247	19·1
Intermediates ...	5906	1742	29·4
Leavers	6799	1217	17·8
Total (Code Groups) ...	19206	4206	21·8
Other Routine Inspections	119	35	29·4

TABLE III.—Return of all Exceptional Children in the Area.

			Boys.	Girls.	Total.
BLIND (including partially blind).	(1) Suitable for training in a School or Class for the totally blind ...	Attending Certified Schools or Classes for the Blind ...	6	6	12
		Attending Public Elementary Schools	1	1	2
		At other Institutions ...	—	—	—
		At no School or Institution ...	5	4	9
	(2) Suitable for training in a School or Class for the partially blind	Attending Certified Schools or Classes for the Blind ..	4	2	6
		Attending Public Elementary Schools	7	6	13
		At other Institutions ...	—	—	—
		At no School or Institution ...	3	1	4
DEAF (including deaf and dumb and partially deaf).	(1) Suitable for training in a School or Class for the totally deaf or deaf and dumb. ...	Attending Certified Schools or Classes for the Deaf ...	14	9	23
		Attending Public Elementary Schools	3	1	4
		At other Institutions .	—	—	—
		At no School or Institution ...	4	1	5
	(2) Suitable for training in a School or Class for the partially deaf .	Attending Certified Schools or Classes for the Deaf . .	4	3	7
		Attending Public Elementary Schools	13	15	23
		At other Institutions ...	—	—	—
		At no School or Institution ...	—	—	—
MENTALLY DEFECTIVE.	(1) Feeble-minded (cases not notifiable to the Local Control Authority).	Attending Certified Schools for Mentally Defective Children..	7	10	17
		Attending Public Elementary Schools	81	63	144
		At other Institutions ...	—	—	—
		At no School or Institution ...	25	19	44
	(2) Notified to the Local Control Authority during the year ...	Feeble-minded	—	—	—
		Imbeciles	17	16	33
		Idiots	3	3	6
EPILEPTICS.	Suffering from severe epilepsy -	Attending Certified Schools for Epileptics	3	3	6
		In Institutions other than Certified Schools	—	—	—
		Attending Public Elementary Schools	—	—	—
		At no School or Institution ...	2	1	3
	Suffering from epilepsy which is not severe ...	Attending Public Elementary Schools	25	19	44
		At no School or Institution ...	4	3	7
PHYSICALLY DEFECTIVE.	Infections pulmonary & glandular tuberculosis ...	At Sanatoria or Sanatorium Schools approved by the Ministry of Health or the Board	6	5	11
		At other Institutions ...	—	—	—
		At no School or Institution ...	5	6	11
	Non-infections but active pulmonary and glandular tuberculosis ...	At Sanatoria or Sanatorium Schools approved by the Ministry of Health or the Board	14	7	21
		At Certified Residential Open-Air Schools	—	—	—
		At Certified Day Open-Air Schools	—	—	—
		At Public Elementary Schools ..	30	25	55
		At other Institutions	—	—	—
		At no School or Institution ...	17	14	31

TABLE III.—continued.

			Boys.	Girls.	Total.
PHYSICALLY DEFECTIVE.	Delicate children (e.g. pre- or latent tuberculosis, malnutrition, debility, anaemia, &c. ..	At Certified Residential Open-Air Schools ...	7	8	15
		At Certified Day Open-Air Schools	—	—	—
		At Public Elementary Schools ...	153	132	285
		At other Institutions ...	—	—	—
		At no School or Institution ...	23	16	39
	Active non-pulmonary tuberculosis ..	At Sanatoria or Hospital Schools approved by the Ministry of Health or the Board ...	42	30	72
		At Public Elementary Schools ..	29	15	44
		At other Institutions ...	32	38	70
		At no School or Institution ...	9	6	15
	Crippled Children (other than those with active tuberculosis) e.g. children suffering from paralysis, &c., and including those with severe heart disease ..	At Certified Hospital Schools ...	1	1	2
		At Certified Residential Cripple Schools	—	—	—
		At Certified Day Cripple Schools .	—	—	—
		At Public Elementary Schools ...	66	42	108
		At other Institutions	—	—	—
		At no School or Institution ...	16	11	27

Table IV.—Return of Defects Treated during the year ended 31st December, 1924.

Treatment Table.

Group I.—Minor Ailments (excluding Uncleanliness).

Disease or Defect.	Number of Defects Treated, or under Treatment during the year.		
	Under the Authority's Scheme.	Otherwise.	Total.
SKIN—			
Ringworm—Scalp	114	38	152
Ringworm—Body	69	4	73
Scabies	39	24	63
Impetigo	864	50	914
Other Skin Disease ...	65	40	105
MINOR EYE DEFECTS ... (External and other, but excluding cases falling in Group II.)	215	101	316
MINOR EAR DEFECTS ...	64	84	148
MISCELLANEOUS ... . (*e.g.* Minor injuries, bruises, sores, chilblains, etc.)	136	51	187
Total ...	1566	392	1958

Group II.—Defective Vision and Squint (excluding Minor Eye Defects Treated as Minor Ailments).

Defect or Disease.	Number of Defects dealt with.			
	Under the Authority's Scheme.	Submitted to Refraction by Private Practitioner or at Hospital apart from Authority's Scheme.	Otherwise.	Total.
Errors of Refraction (including Squint). Operations for Squint should be recorded separately in body of Report	1382	245	144	1771
Other Defect or Disease of the Eyes (excluding those recorded in Group I.) ...	—	—	—	-
Total ...	1382	245	144	1771

Total number of Children for whom Spectacles were prescribed—

(*a*) Under Authority's Scheme	...	1142
(*b*) Otherwise	...	289

Total number of Children who obtained or received Spectacles—

(*a*) Under Authority's Scheme	...	665
(*b*) Otherwise	...	204

Group III.—Treatment of Defects of Nose and Throat.

NUMBER OF DEFECTS.				
Received Operative Treatment.			Received other forms of Treatment.	Total Number Treated.
Under the Authority's Scheme, in Clinic or Hospital.	By Private Practitioner or Hospital, apart from Authority's Scheme.	Total.		
196	99	295	324	619

Group IV.—Dental Defects.

(1) Number of Children who were

(a) Inspected by the Dentist :—

	Aged			
Routine age Groups.	5	1024	Total	4985
	6	1385		
	7	1501		
	8	1075		
	9	—		
	10	—		
	11	—		
	12	—		
	13	—		
	14	—		
Specials				197
		Grand Total		5182

(b) Found to require Treatment 4338

(c) Actually Treated 2337

(d) Re-treated during the year as the result of periodical Examination 1363

(2) Half-days devoted to { Inspection ... 161 / Treatment ... 594 } Total 755

(3) Attendances made by Children for Treatment ... 5026

(4) Fillings { Permanent Teeth ... 389 / Temporary Teeth .. 2543 } Total 2932

(5) Extractions { Permanent Teeth ... 103 / Temporary Teeth ... 6816 } Total 6919

(6) Administrations of general Anaesthetics for Extractions Nil.

(7) Other Operations { Permanent Teeth... 40 / Temporary Teeth...241 } Total 281

Group V.—Uncleanliness and Verminous Conditions.

(1) Average number of visits per School made during the year by the School Nurses 5

(2) Total number of Examinations made of Children in the Schools by School Nurses 140,368

(3) Number of individual Children found unclean ... 4,531

(4) Number of Children cleansed under arrangements made by the Local Education Authority ... —

(5) Number of Cases in which Legal Proceedings were taken—

(a) Under the Education Act, 1921 ... —

(b) Under School Attendance Bye-laws ... —

APPENDIX II.

STATISTICAL TABLES.

Secondary Schools.

Secondary Schools.

TABLE I.—Shewing Number of Children Examined at Different Ages.

														Total.
Ages	5	6	7	8	9	10	11	12	13	14	15	16	17	18	
Boys		—	5	16	41	43	122	250	97	34	70	77	33	18	806
Girls ...	—	-	14	15	17	32	97	154	98	38	43	36	28	24	596
Totals	—	—	19	31	58	75	219	404	195	72	113	113	61	42	1402

Secondary Schools.

Table II. Shewing Nature of Defects referred to for Treatment and cases where Defects were Remedied.

DEFECT OR DISEASE.	Referred for Treatment.	Received Treatment.
MALNUTRITION	—	—
UNCLEANLINESS—		
Head	2	2
Body	—	—
SKIN—		
RINGWORM—		
Head	—	—
Body	—	—
Scabies	—	—
Impetigo	—	—
Other Diseases	1	1
EYE—		
Defective Vision or Squint	76	58
External Eye Disease	10	8
EAR—		
Defective Hearing	1	1
Ear Disease	1	1
TEETH—		
Dental Disease	155	109
NOSE AND THROAT—		
Enlarged Tonsils	12	7
Adenoids	1	1
Defective Speech		—
Tonsils and Adenoids	1	1
Other Conditions	2	2
HEART AND CIRCULATION—		
Heart Disease—		
Organic	5	5
Functional	1	1
Anæmia	9	8
LUNGS—		
Pulmonary Tuberculosis—		
Definite	—	—
Suspected	—	—
Chronic Bronchitis	1	—
Other Disease	—	—
NERVOUS SYSTEM—		
Epilepsy	—	—
Chorea	1	1
Other Disease	—	—
NON-PULMONARY TUBERCULOSIS—		
Glands	—	—
Bones and Joints	—	—
Spine	—	—
Hip	—	—
Other Forms	—	—
Rickets	—	—
Deformities—Spinal Curvature .. .	21	20
OTHER DEFECTS OR DISEASES	35	31